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Notice of Allowability

Application No.

10/613,654

Applicant(s)

KEREN ET AL.

Examiner

Matthew F. DeSanto

Art Unit

3763

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 9/19/07, 9/27/07.
2. ☒ The allowed claim(s) is/are 57-88.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413), Paper No./Mail Date <u>9/27/07</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Nathan Cassell on September 27, 2007.

The application has been amended as follows:

Cancel Claims 1-56.

Add Claims:

59. (new) The system of claim 57, wherein the fluid agent comprises a diuretic.

60. (new) The system of claim 57, wherein the fluid agent comprises Furosemide.

61. (new) The system of claim 57, wherein the fluid agent comprises Thiazide.

62. (new) The system of claim 57, wherein the fluid agent comprises a vasopressor.

63. (new) The system of claim 57, wherein the fluid agent comprises Dopamine.

64. (new) The system of claim 57, wherein the fluid agent comprises a vasodilator.

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65. (new) The apparatus of claim 57, wherein the first engagement member comprises a rib or a barb.

66. (new) The apparatus of claim 57, wherein the first engagement member comprises an inflatable member.

67. (new) The apparatus of claim 57, wherein the first engagement member comprises a self-expanding hydrogel material.

68. (new) The apparatus of claim 57, wherein the first engagement member comprises a low density, biocompatible sponge-like material.

69. (new) The apparatus of claim 57, wherein the strand comprises a nickel-titanium alloy.

70. (new) The apparatus of claim 57, further comprising a one-way valve that communicates with the lumen.

71. (new) The apparatus of claim 57, further comprising a blood pump that communicates with the lumen, wherein the blood pump comprises a member selected from the group consisting of an implantable blood pump and an external blood pump.

72. (new) The apparatus of claim 57, further comprising a drug infusion device that communicates with the lumen.

73. (new) The apparatus of claim 57, further comprising a filament looped through an opening at a bifurcation of the first and second branch conduits.

74. (new) The system of claim 58, wherein the fluid agent comprises a diuretic.

75. (new) The system of claim 58, wherein the fluid agent comprises Furosemide.

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76. (new) The system of claim 58, wherein the fluid agent comprises Thiazide.
77. (new) The system of claim 58, wherein the fluid agent comprises a vasopressor.
78. (new) The system of claim 58, wherein the fluid agent comprises Dopamine.
79. (new) The system of claim 58, wherein the fluid agent comprises a vasodilator.
80. (new) The apparatus of claim 58, wherein the first engagement member comprises a rib or a barb.
81. (new) The apparatus of claim 58, wherein the first engagement member comprises an inflatable member.
82. (new) The apparatus of claim 58, wherein the first engagement member comprises a self-expanding hydrogel material.
83. (new) The apparatus of claim 58, wherein the first engagement member comprises a low density, biocompatible sponge-like material.
84. (new) The apparatus of claim 58, further comprising a strand of an elastic, high strength material embedded in the bifurcation.
85. (new) The apparatus of claim 84, wherein the strand comprises a nickel-titanium alloy.
86. (new) The apparatus of claim 58, further comprising a blood pump that communicates with the lumen, wherein the blood pump comprises a member selected from the group consisting of an implantable blood pump and an external blood pump.

87. (new) The apparatus of claim 58, further comprising a drug infusion device that communicates with the lumen.

88. (new) The apparatus of claim 58, further comprising a filament looped through an opening at a bifurcation of the first and second branch conduits.

Reasons for Allowance

The subject matter of the independent claims could either not be found or was not suggested in the prior art of record. The subject matter not found for claim 57 is a catheter that has an inlet and a branched outlet with two branch conduits that each has an engagement member that engages a vessel in the patient. The catheter further includes an elastic strength member that is embedded in the bifurcation of the first and second branch conduit. The catheter is capable of being fully inserted into a patient, so that the branch conduit folds into a side-by-side configuration, thus making the catheter easier to maneuver through the circulatory system. The subject matter not found for claim 58 is a catheter that has an inlet and a branched outlet with two branch conduits that each has an engagement member that engages a vessel in the patient. The catheter further includes a one-way valve that is in the central lumen, so that the valve can control the blood flow during systole and diastole. The catheter is capable of being fully inserted into a patient, so that the branch conduit folds into a side-by-side configuration, thus making the catheter easier to maneuver through the circulatory system.

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The independent claims also include other patentable subject matter in combination with the other elements or steps of the claim not mention in the above paragraph.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew F. DeSanto whose telephone number is 571-272-4957. The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick LUCCHESI can be reached on (571) 272-4977. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Matthew DeSanto
Art Unit 3763
September 27, 2007

MATTHEW F. DESANTO
PRIMARY EXAMINER

